

FILE 'CAPLUS, USPATFULL' ENTERED AT 16:04:47 ON 23 SEP 2005

L1 464565 S LITHIUM
L2 13575 S INJECT? (2A) (TUMOR OR ARTER?)
L3 114361 S LINOLEIC OR ARACHIDON? OR ARACHODON? OR EICOSAP? OR DOCOSAH?
L4 29 S L1 (2A) L3
L5 0 S L4 (P) L2
L6 59 S L2 (P) L3
L7 4712 S INJECT? (2A) ARTER?
L8 37 S L7 (P) L3
L9 4 S L8 (P) (CANCER? OR TUMOR)
L10 9352 S INJECT? (2A) TUMOR
L11 0 S L10 (2A) L3
L12 26 S L10 (P) L3
L13 22 S L12 NOT L9
L14 435 S INJECT? (2A) FATTY ACID
L15 2 S L14 (2A) TUMOR
L16 9352 S INJECT? (2A) TUMOR
L17 0 S FATTY ACID (2A) L16
L18 39 S FATTY ACID (P) L16
L19 43 S FATTY ACID (P) L7
L20 19 S L19 (P) (CANCER? OR TUMOR?)
L21 39 S L19 NOT L9
L22 15 S L20 NOT L9
L23 56130 S ?ANGIOGEN? OR ENDOSTATIN OR ANGIOSTATIN OR THALIDOMIDE
L24 3 S L7 (2A) L23
L25 0 S L24 (P) (CANCER OR TUMOR)
L26 25 S L7 (P) L23 (P) (CANCER? OR TUMOR?)
L27 25 S L26 NOT L24

=>

L22 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1989:587599 CAPLUS

DOCUMENT NUMBER: 111:187599

TITLE: Fatty acids dissolved in iodinated oils for treatment of tumors

INVENTOR(S): Nakano, Sadahiro; Fukushima, Shoji; Isoda, Yoshihiro; Yamaguchi, Shigehiko

PATENT ASSIGNEE(S): Nippon Oils & Fats Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| ----- | ---- | ----- | ----- | ----- |
| JP 63303925 | A2 | 19881212 | JP 1987-139861 | 19870605 |
| PRIORITY APPLN. INFO.: | | | JP 1987-139861 | 19870605 |

AB An antitumor composition is prepared by dissolving **fatty acids** or their derivs. in iodinated oils. Pentadecanoic acid 5 and an iodinated oil 95% by weight were mixed. This mixture (0.1 mL) was **injected** into the **artery** of the liver in the rabbit bearing VX-2 **tumor**, and a significant decrease of the **tumor** on Day 7 was observed. A mixture of linolic acid and iodinated oil (1:9) was also effective.

L22 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:375790 CAPLUS

DOCUMENT NUMBER: 127:93463

TITLE: Efficacy of hyperthermia and polyunsaturated fatty acids on experimental carcinoma

AUTHOR(S): Kokura, Satoshi; Yoshikawa, Toshikazu; Kaneko, Toshiro; Iinuma, Shoji; Nishimura, Shunichiro; Matsuyama, Kiichi; Naito, Yuji; Yoshida, Norimasa; Kondo, Motoharu

CORPORATE SOURCE: First Dep. Internal Medicine, Kyoto Prefectural Univ. Medicine, Kyoto, 602, Japan

SOURCE: Cancer Research (1997), 57(11), 2200-2202
CODEN: CNREA8; ISSN: 0008-5472

PUBLISHER: American Association for Cancer Research

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The authors investigated the efficacy of hyperthermia and γ -linolenic acid on exptl. carcinoma. This study focused on polyunsatd. **fatty acids** that are substrates for free radical reactions. Oleic acid, linolenic acid, α -linolenic acid, or γ -linolenic acid was **injected** into the **arteries** feeding AH109A carcinoma implanted into rat hind limbs. Among these, γ -linolenic acid had the greatest effect on **tumor** tissue lipid peroxidn. and demonstrated an antitumor effect. Consequently, γ -linolenic acid injection into the feeding artery of a **tumor** was performed immediately prior to hyperthermia. This combination therapy induced a high level of lipid peroxidn. in **tumor** tissue and a significant antitumor effect. Hyperthermia combined with γ -linolenic acid produces free radical reactions by increasing the radical reaction substrate and may be an effective anticancer modality.

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB The authors investigated the efficacy of hyperthermia and γ -linolenic acid on exptl. carcinoma. This study focused on polyunsatd. **fatty acids** that are substrates for free radical reactions. Oleic acid, linolenic acid, α -linolenic acid, or γ -linolenic acid was **injected** into the **arteries** feeding AH109A carcinoma implanted into rat hind limbs. Among these, γ -linolenic acid had the greatest effect on **tumor** tissue lipid peroxidn. and demonstrated an antitumor effect. Consequently, γ -linolenic acid injection into the feeding artery of a **tumor** was performed immediately prior to hyperthermia. This combination therapy induced a high level of lipid peroxidn. in **tumor** tissue and a significant antitumor effect. Hyperthermia combined with γ -linolenic acid produces free radical reactions by increasing the radical reaction substrate and may be an effective anticancer modality.

L22 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1989:587599 CAPLUS

DOCUMENT NUMBER: 111:187599

TITLE: Fatty acids dissolved in iodinated oils for treatment

L27 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:556609 CAPLUS

DOCUMENT NUMBER: 122:306070

TITLE: Antitumor effect of arterial administration of a medium-chain triglyceride solution of an angiogenesis inhibitor, TNP-470, in rabbits bearing VX-2 carcinoma

AUTHOR(S): Yanai, Shigeo; Okada, Hiroaki; Saito, Kazuhiro; Kuge, Yuji; Misaki, Masafumi; Ogawa, Yasuaki; Toguchi, Hajime

CORPORATE SOURCE: DDS Res. Lab., Takeda Chemical Industries, Ltd., Osaka, 532, Japan

SOURCE: Pharmaceutical Research (1995), 12(5), 653-7
CODEN: PHREEB; ISSN: 0724-8741

PUBLISHER: Plenum

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Using rabbits bearing VX-2 carcinoma on the inner side of the leg, we examined the antitumor activity of a medium-chain triglyceride (MCT) solution of an **angiogenesis** inhibitor, TNP-470 (AGM-1470, 6-O-(N-chloroacetylcarbamoyl)-fumagillol), following administration into the femoral artery feeding the **tumor**. The MCT solution of TNP-470 (1 and 5 mg) strongly suppressed **tumor** growth following a single intra-arterial (i.a.) **injection** 2 or 3 wk after **tumor** inoculation. Moreover, remarkable regression of well-developed **tumors**, those 4 wk after inoculation, was obtained by i.a. injection of the MCT solution containing 20 mg of TNP-470 without any influence on body weight. The antitumor effects were potentiated by coadministration of doxorubicin or mitomycin C (MMC) in the solution or microspheres containing MMC. In a shell-less chorioallantoic membrane (CAM) assay, **angiogenesis** was inhibited when a droplet of the MCT solution containing 25 µg of TNP-470 was placed on the CAM for 2 days, suggesting that the prolonged antitumor effect resulted from the inhibition of **tumor** neovascularization by sustained drug release from the preparation. These results indicate that i.a. injection of the MCT solution of TNP-470 is promising for treating well-developed **tumors**.

AB Using rabbits bearing VX-2 carcinoma on the inner side of the leg, we examined the antitumor activity of a medium-chain triglyceride (MCT) solution of an **angiogenesis** inhibitor, TNP-470 (AGM-1470, 6-O-(N-chloroacetylcarbamoyl)-fumagillol), following administration into the femoral artery feeding the **tumor**. The MCT solution of TNP-470 (1 and 5 mg) strongly suppressed **tumor** growth following a single intra-arterial (i.a.) **injection** 2 or 3 wk after **tumor** inoculation. Moreover, remarkable regression of well-developed **tumors**, those 4 wk after inoculation, was obtained by i.a. injection of the MCT solution containing 20 mg of TNP-470 without any influence on body weight. The antitumor effects were potentiated by coadministration of doxorubicin or mitomycin C (MMC) in the solution or microspheres containing MMC. In a shell-less chorioallantoic membrane (CAM) assay, **angiogenesis** was inhibited when a droplet of the MCT solution containing 25 µg of TNP-470 was placed on the CAM for 2 days, suggesting that the prolonged antitumor effect resulted from the inhibition of **tumor** neovascularization by sustained drug release from the preparation. These results indicate that i.a. injection of the MCT solution of TNP-470 is promising for treating well-developed **tumors**.

L27 ANSWER 14 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:273655 CAPLUS

DOCUMENT NUMBER: 122:64141

TITLE: Antitumor activity of a medium-chain triglyceride solution of the angiogenesis inhibitor TNP-470 (AGM-1470) when administered via the hepatic artery to rats bearing Walker 256 carcinosarcoma in the liver

AUTHOR(S): Yanai, Shigeo; Okada, Hiroaki; Misaki, Masafumi;
Saito, Kazuhiro; Kuge, Yuji; Ogawa, Yasuaki; Toguchi,
Hajime
CORPORATE SOURCE: DDS Research Laboratories, Pharmaceutical Research
Division, Osaka, 532, Japan
SOURCE: Journal of Pharmacology and Experimental Therapeutics
(1994), 271(3), 1267-73
CODEN: JPETAB; ISSN: 0022-3565
PUBLISHER: Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The antitumor effect of an **angiogenesis** inhibitor, TNP-470
[AGM-1470, 6-O-(N-chloroacetylcarbomoyl)fumagillol], administered via the
hepatic artery in a medium-chain triglyceride (MCT) solution, in which
TNP-470 is very stable, was examined in rats bearing Walker 256
carcinosarcoma in the liver. The MCT solution containing 0.1 mg of TNP-470
completely suppressed **tumor** growth after a single
arterial injection, and the solns. containing 0.5.apprx.5 mg
of TNP-470 caused **tumor** regression without severe side effects
on body weight gain or liver function. These antitumor effects lasted for at
least 2 wk. Moreover, the administration of the MCT solution containing 5 mg
of
TNP-470 also caused remarkable regression of well-developed enlarged
tumors 2 wk after inoculation, indicating potential in the
treatment of unresectable hepatic **cancer**. When the MCT solution
containing radiolabeled TNP-470 was injected via the hepatic artery, the
initial radioactivity in the **tumor** was 22 times that in the
normal part of the liver and 5.7 times that in the **tumor** when an
aqueous solution of radiolabeled TNP-470 was injected. Also, in the case of
the
MCT solution, the radioactivity in the **tumor** was maintained at a
relatively high level for over 2 wk after injection. These results
indicate that the remarkable antitumor effect resulted from the selective
delivery and prolonged retention of TNP-470 at the **tumor** site.
AB The antitumor effect of an **angiogenesis** inhibitor, TNP-470